Focus on **Wilson Creek Sub-basin Bacteria TMDL**

WASHINGTON STATE DEPARTMENT OF ECOLOGY

Water Quality Program

Background

The Washington Department of Ecology (Ecology) is seeking assistance from citizens and local government to help solve water quality problems in the Wilson Creek sub-basin. It will take voluntary help from many who live and work in the community to clean up these waters for current and future generations.

The Wilson Creek sub-basin includes approximately 382 square miles in the upper reaches of the Yakima River basin in central Washington, near the city of Ellensburg. In recent years, extensive water quality data has been collected throughout the sub-basin by Ecology, the Kittitas County Water Purveyors, the Kittitas County Conservation District, and the U.S. Geological Survey, among others. Studies based on this data show that fecal coliform bacteria concentrations frequently exceed state water quality standards at many locations in the Wilson Creek sub-basin.

Because of these high fecal coliform levels, the Wilson Creek sub-basin has been identified as a priority for study and cleanup.

Why are fecal coliform bacteria a concern?

- Fecal coliform can serve as an "indicator species" showing that disease-causing or pathogenic organisms may be present in a stream or lake.
- People could be at risk of contracting some diseases associated with fecal coliform bacteria if they come in contact with contaminated water.
- Federal law requires the state to protect the "most sensitive" beneficial uses found in water bodies, including the ability to wade, swim and fish in the state's lakes, rivers and streams.

What have we found in the Wilson Creek sub-basin?

In many areas of the Wilson Creek sub-basin, levels of fecal coliform bacteria are 1) often much greater than the levels allowed under state water quality standards, and 2) significantly higher during the period from April through October than during the rest of the year.

What are the sources of fecal coliform bacteria?

The presence of fecal coliform bacteria indicates that human and/or animal waste is entering the water. In the Wilson Creek sub-basin, sources that have been identified include failing septic systems, livestock, wildlife (birds, rodents and others), and pets.

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Federal law requires cleanup of polluted waters.

Federal law requires all states to 1) identify sources of pollution in waters that do not meet water quality standards and 2) determine how much the pollution needs to be reduced in order to restore the water body to good quality. Using this information, Ecology and local interests will develop strategies for achieving the necessary reduction of pollution. The result will be an assessment and a water cleanup plan or Total Maximum Daily Load (TMDL). This TMDL will provide target levels and an implementation plan to reduce fecal coliform bacteria to levels that will protect human health.

What actions can help reduce fecal coliform concentrations?

Ecology will work cooperatively with the residents of the Wilson Creek sub-basin and other interested groups and individuals to develop the most reasonable and effective strategies to reduce fecal coliform concentrations. Among the approaches that may be considered include:

- Identify and renovate failing septic systems
- Modify livestock management practices to reduce animal contact with water bodies
- Modify irrigation practices to reduce transport of bacteria into adjacent water bodies
- Public education regarding pet management

How can you participate?

We need your help. Improving the water quality will require action by many people. If you would like to be on a mailing list to receive information related to water quality in the Wilson Creek sub-basin and to receive information on related public meetings and comment periods, please contact Jane Creech at (509) 925-2557 or jton461@ecy.wa.gov.

Information gathered from interested citizens and local governments will be used to develop a strategy that identifies how, when and where activities can be implemented to reduce fecal coliform pollution to meet water quality standards.